PUNJAB STATE ELECTRICITY REGULATORY COMMISSION

1. Petition No. 35 of 2012 (Suo-Motu), Date of Order: 19-07-2012

2. Petition No. 37 of 2013 (Suo Moto), Date of order : 25-06-2013

In the matter of:

1. Adoption of Central Electricity Regulatory Commission (Terms & Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012 and Determination of generic levellised generation tariff for Renewable Energy Power Projectsfor FY 2012-13
2. Determination of generic levelised generation tariff for Renewable Energy Power Projects for FY 2013-14

ORDER

The Punjab State Electricity Regulatory Commission (Commission) in its Order dated 19.07.2012 in Petition No. 35 of 2012 (Suo-Motu) for adoption of Central Electricity Regulatory Commission (Terms & Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012 (CERC RE Regulations, 2012) and determination of generic levellised generation tariff for Renewable Energy Power Projects for FY 2012-13, after due process, adopted the said Regulations with State specific modifications in respect of Non-fossil fuel based Co-generation Projects and also determined the generic levellised generation tariff for Renewable Energy Power Projects (RE Projects) for FY 2012-13.

Recently, Central Electricity Regulatory Commission (CERC) has, determined the generic tariff of RE Projects for the second year (FY 2013-14) of the five years control period in its Order dated 28.02.2013 in Petition No. 243/SM//2012 (Suo-Motu).

Accordingly, in order to adopt CERC RE Regulations 2012, the Commission's findings on the aforementioned issues, after taking into consideration the comments/suggestions of the stakeholders, are as hereunder:

(i) Plant Load Factor (PLF) and number of operating days for Non-fossil fuel based Co-generation:

The Commission is of the considered opinion that there is need to optimize generation from these Co-generation plants during off-season and as such specifies a PLF of 80% in case of Non-fossil fuel based Co-generation projects.

The Commission decides to fix the number of operating days for the Non-fossil fuel based Co-generation Projects on bagasse operation as 100 days [80 days (crushing) + 25% i.e. 20 days (offseason)] and the remaining period during the year on biomass fuel mix for operation of such plants at a PLF of 80%.

Accordingly, tariff for Non-fossil fuel based Co-generation Projects has been determined on the basis of weighted average of various parameters for bagasse and biomass.

(ii) Fuel Cost and Fuel Cost Escalation

The Commission decides to allow fuel cost escalation @ 5% per annum in line with the CERC RE Regulations 2012.

The median value being Rs.2756 per MT, the same has been specified as the biomass fuel mix price for FY 2012-13, for FY 2012-13, an escalation factor of 5%, the bagasse price is fixed as Rs.1591 per MT.

Accordingly, the weighted average price of fuel for Non-fossil fuel based Co-generation projects works out to Rs.2357 per MT which is adopted by the Commission for tariff determination for FY 2012-13.

(iii) Return on Equity (ROE)

The normative RoE at 20% (pre-tax) per annum for the first ten years and 24% (pre-tax) per annum 11th year onwards in line with CERC RE Regulations 2012.

(iv) Norms/parameters for projects less than 1 MW:

The Commission adopts the methodology specified by Hon'ble APTEL for projects having capacity less than 1 MW i.e. fixing the requisite norms/parameters on pro-rata basis.

(iv) Competitive Bidding

The Commission decides that if tariff based competitive bids are invited for purchase of electricity from RE Power Projects and the per unit tariff offered by the lowest bidder is less than the aforementioned tariff, a petition shall be filed by the procurer for consideration and adoption of tariff by the Commission under Section 63 of the Electricity Act, 2003 till such time tariff based competitive bidding is resorted to, bidding may be carried out on the basis of discount to be offered by the prospective bidders on the generic tariffs determined by the Commission in this Order, which would be the maximum/ceiling tariff for the purpose.

Accordingly, the generic tariffs for the various types of RE projects/technologies to be commissioned during the year 2013-14 is as indicated below:

Generic Tariff for RE technologies for FY 2013-14

Levellised Fixed Cost (Rs./kWh)	Variable Cost (FY 2013-14) (Rs./kWh)	Applicable Tariff Rate (Rs./kWh)	Benefit of Accelerated Depreciation, if availed (Rs./kWh)	Net Applicable Tariff Rate upon adjusting for Accelerated Depreciation benefit (3-4) (Rs./kWh)
1	2	3	4	5
Biomass based Power Projects				
2.27	3.97	6.24	0.14	6.10
Non-Fossil Fuel based Co-Generation Projects				
2.04	3.66	5.70	0.13	5.57
Biomass Gasifier Power Projects				
2.42	4.10	6.52	0.12	6.40
Biogas based Power Projects				
3.30	3.61	6.91	0.24	6.67

Particulars	Applicable Tariff Rate (Rs./kWh)	Benefit of Accelerated Depreciation, if availed (Rs./kWh)	Net Applicable Tariff Rate upon adjusting for Accelerated Depreciation benefit (2-3) (Rs./kWh)
1	2	3	4
Small Hydro Power Projects			
Below 5 MW	5.16	0.42	4.74
5 to 25 MW	4.40	0.38	4.02
Wind Energy Power Projects			
Wind Zone-1	6.29	0.49	5.80
Solar Power Projects			
Solar PV	8.75	0.88	7.87
Solar Thermal	11.90	1.21	10.69

Any subsidy including capital subsidy/Central Financial Assistance or generation based incentive (which is a substitute for accelerated depreciation benefits) available to the developer shall be required to be passed on to the utilities on actual disbursement basis.

In the circumstances, Punjab State Power Corporation Ltd. will, before signing the power purchase agreement with the developer, work out subsidy availed by the developer as per the formulae indicated in the applicable scheme framed by Ministry of New & Renewable Energy, Govt. of India (MNRE) and reduce the tariff to that extent for a period of 12 years. However, for Biomass Gasifier Power Projects and Biogas based Power Projects, the subsidy granted by MNRE has already been accounted for, in the tariff calculations.

100% of the gross proceeds on account of CDM benefit are to be retained by the project developer in the first year after the COD and the share of beneficiaries shall be 10% in the second year and progressively increase by 10% every year till it reaches 50%, where after the proceeds are to be shared in equal proportion.

Sharing of the CDM benefit, if any, shall be applicable after the sale proceeds from Carbon Emission Reductions (CERs) are received by the project developer.